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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,121	06/07/2005	Hatsuhiko Harashina	2101-19	1930
23117	7590	06/15/2006		
NIXON & VANDERHYE, PC			EXAMINER	
901 NORTH GLEBE ROAD, 11TH FLOOR			SANDERS, KRIELLION ANTIONETTE	
ARLINGTON, VA 22203				
			ART UNIT	PAPER NUMBER
			1714	

DATE MAILED: 06/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/538,121	HARASHINA ET AL.	
	Examiner Kriellion A. Sanders	Art Unit 1714	

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 23 March 2006.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,3-5,9-12,14-16 and 18-23 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,3-5,9-12,14-16 and 18-23 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-5, 9-12, 14-16 and 18-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harashina, US Patent No. 6,673,405 and Sakurai et al., US Patent No. 4526921 in view of Auerbach et al, US Patent No. 4843115 and further in view of Japanese Patents Nos. 2002-201334, 2000-119485 and 10-67942.

Harashina discloses polyacetal compositions that may include all of the additives disclosed by applicant. See col. 2, line 40 through col. 18, line 31. Harashina expresses that it is preferable to include guanamine compounds in the compositions. See col. 12, lines 13-61. The use of the patented compositions in automotive parts requiring reduced formaldehyde emissions is disclosed at col. 17, lines 45-63. Harashina indicates preferred methods for processing the compositions including the utilization of specific amounts of additives that overlap those of applicant's. The patented invention differs from applicant's invention as presently claimed in that the guanamines of the patented invention have a spiro ring structure.

Sakuri et al discloses acetal resin compositions comprising a polycarbonate compound, Patentee indicates that it is preferable to include an amine-substituted triazine compound in the composition. These amine-substituted compounds correspond to the guanamine stabilizers of

applicant's invention and are used in amounts ranging from 0.01 to 5.0 wt% based on 100 parts by weight of the composition. Known additives, such as hindered phenolic antioxidants are included in the patented composition. See col. 5, line 31 through col. 6, line 21 and col. 7, lines 11-21.

Auerbach et al discloses polyacetal compositions having a reduced tendency to form mold deposits upon molding wherein said compositions comprise a superpolyamide in combination with a cyclic amidine compound as a stabilizing combination. The amidine compound is used in amounts ranging from 0.001 to about 1.0 wt% of the composition and contains a bulky substituent, such as an aryl group, on the 4 carbon atom of the amidine structure. These amidine compounds correspond to the guanamine stabilizers of applicant's invention, with the exception of possessing an aromatic group in position 4 as opposed to an amine residue. The compositions also comprise hindered phenolic antioxidants. See col. 2, line 1 through col. 4, line 49, col. 9, lines 39-64, col. 10, lines 53-61 and col. 11, lines 16-34.

The amine-substituted compounds of Sakuri et al also correspond to the guanamine stabilizers of Auerbach et al, in that they may be substituted with aromatic moieties. Therefore, the amidines of Auerbach are equated to the amine-substituted compounds of Sakuri et al.

Sakuri et al documents that guanamine compounds corresponding to those of applicant's presently claimed invention are known for their ability to improve adhesive strength of polyacetal compositions when used in conjunction with polycarbonates in polyacetal compositions.

Each of the Japanese Patents disclose polyacetal resin compositions that comprise an antioxidant and guanamine compound or derivatives thereof, that overlap with those antioxidants and guanamine compounds of the present claims.

See the English translation of 2002-201334 wherein additional additives including processing and heat stabilizers, long-chain fatty acids and benzotriazoles are disclosed at pages 4-6.

See the English translation of 2000-119485 wherein additional additives including processing and heat stabilizers, polyamides, long-chain fatty acids and benzotriazoles are disclosed at pages 5-8.

See the English translation of 10-067942 wherein additional additives including light and heat stabilizers, polyamides, long-chain fatty acids and benzotriazoles are disclosed at pages 8-10.

Applicant's presently claimed compositions include conventional components disclosed by the prior art references at their customary loadings and nothing of an unobvious nature is seen by selecting these conventional components and combining them into a composition for their art-recognized purposes.

***Response to Arguments***

1. Applicant's arguments filed 3/23/06 have been fully considered but they are not persuasive.

Applicant argues that all of the cited references fail to teach the guanamine compounds of the present invention and that contrary to applicant's invention, the Japanese references disclose

a guanamine compound having a “simple structure”. These arguments are not persuasive.

Applicant’s claimed guanamine compounds are taught by each of Sakurai et al., and the Japanese References Nos. 2000-119485 and 10-67942.

Applicant argues that he has shown unexpected results in the use of the “simple guanamines” of the present invention. However, applicant’s comparative data employs a melamine derivative as a comparative compound wherein the melamine derivative is not considered to be the closest prior art compound for comparative purposes. Also the comparative data at pages 98-104 of the specification is not commensurate in scope with the present claims.

*Conclusion*

2. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kriellion A. Sanders whose telephone number is 571-272-1122. The examiner can normally be reached on Monday through Thursday 6:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kriellion A. Sanders  
Primary Examiner  
Art Unit 1714

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